

Claims

[c1] What is claimed is:

1. A method for calibrating an image generated from a scanner when scanning a document, the scanner comprising:
 - a housing comprising a transparent platform positioned on the housing for placing the document thereon;
 - a light-distributing device positioned above the transparent platform for projecting light on the document;
 - a track positioned inside the housing parallel with a scanning direction of the scanner; and
 - a scanning module movably positioned on the track for sensing the light passing through the document and generating a corresponding scan signal; the method comprising:
 - amplifying or decaying the scan signal generated from the scanning module according to a position of the scanning module located on the track when the scanning module slides along the track to scan the document.

[c2] 2. The method of claim 1 further comprising:

- moving the scanning module along the track for sensing the light, which is generated from the light-distributing device and passes through the transparent platform, and generating a corresponding calibration signal when no document is positioned on the transparent platform; and
- using the calibration signal, which is generated from the scanning module moving to a first position on the track without the document positioned on the transparent platform, to amplify or decay the scan signal when the document is positioned on the transparent platform to be scanned and when the scanning module reaches the first position on the track to scan the document.

[c3] 3. The method of claim 2 wherein the scan signal is amplified by a correction factor when the scan signal is weaker than a standard value, and the scan signal approaches the standard value after being amplified by the correction factor.

[c4] 4. The method of claim 2 wherein the scan signal is decayed by a correction factor when the scan signal is stronger than a standard value, and the scan

signal approaches the standard value after being decayed by the correction factor.

- [c5] 5. The method of claim 2 further comprising recording the calibration signal.
- [c6] 6. The method of claim 1 wherein the scanning module comprises a plurality of sensors, and each sensor is used for sensing the light projecting on the scanning module to generate a corresponding pixel-scan-signal so that the scan signal generated from the scanning module comprises a plurality of pixel-scan-signals generated from the sensors;
the method further comprising:
amplifying the pixel-scan-signal generated from one of the sensors with corresponding correction factor when the pixel-scan-signal is weaker than a standard value; and
decaying the pixel-scan-signal generated from one of the sensors with corresponding correction factor when the pixel-scan-signal is stronger than the standard value.
- [c7] 7. The method of claim 6 further comprising:
moving the scanning module along the track for sensing the light, which is generated from the light-distributing device and passes through the transparent platform, and each sensor generating a corresponding pixel-calibration-signal when no document is positioned on the transparent platform;
and
determining the correction factor of the pixel-scan-signal, which is generated from the scanning module scanning the document at a first position on the track, according to the corresponding pixel-calibration-signal generated from the sensor of the scanning module located at the first position on the track when no document is positioned on the transparent platform.
- [c8] 8. A scanner comprising:
a housing comprising a transparent platform positioned on the housing for placing a document thereon;
a light-distributing device positioned above the transparent platform for projecting light on the document;

a track positioned inside the housing parallel with a scanning direction of the scanner;
a scanning module movably positioned on the track for sensing the light passing through the document and generating a corresponding scan signal; and
a processing circuit for controlling the scan signal;
wherein the processing circuit amplifies or decays the scan signal according to a position of the scanning module located on the track when the scanning module slides along the track to scan the document.

[c9] 9. The scanner of claim 8 wherein the scanning module moves along the track for sensing the light, which is generated from the light-distributing device and passes through the transparent platform, and generates a corresponding calibration signal when no document is positioned on the transparent platform, and the processing circuit uses the calibration signal, which is generated from the scanning module moving to a first position on the track without the document positioned on the transparent platform, to amplify or decay the scan signal when the scanning module moves to the first position on the track for scanning the document which is positioned on the transparent platform.

[c10] 10. The scanner of claim 9 wherein the processing circuit amplifies the scan signal by a correction factor when the scan signal is weaker than a standard value, and the scan signal approaches the standard value after being amplified by the correction factor.

[c11] 11. The scanner of claim 9 wherein the processing circuit decays the scan signal by a correction factor when the scan signal is stronger than a standard value, and the scan signal approaches the standard value after being decayed by the correction factor.

[c12] 12. The scanner of claim 9 further comprising a recording circuit for storing the calibration signal.

[c13] 13. The scanner of claim 9 being connected to a computer, and the calibration signal being stored in the computer.

[c14] 14. The scanner of claim 8 wherein the scanning module comprises a plurality

of sensors, each sensor is used for sensing the light projecting on the scanning module to generate a corresponding pixel-scan-signal, the scan signal generated from the scanning module comprises a plurality of the pixel-scan-signals generated from the sensors, and the processing circuit amplifies and decays pixel-scan-signals generated from different sensors with corresponding correction factors after comparing the pixel-scan-signals with a standard value.

[c15] 15. The scanner of claim 14 wherein the scanning module moves along the track for sensing the light which is generated from the light-distributing device and passes through the transparent platform, uses each sensor for generating a corresponding pixel-calibration-signal when no document is positioned on the transparent platform, and the processing circuit determines the correction factor of the pixel-scan-signal, which is generated from the scanning module scanning the document at a first position on the track, according to the corresponding pixel-calibration-signal generated from the sensor of the scanning module located at the first position on the track when no document is positioned on the transparent platform.